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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/083,165	02/26/2002	Walter F. Rausch	1604	7463
28004	7590	02/24/2005	EXAMINER	
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KSOPHT0101-Z2100			PAPER NUMBER	
OVERLAND PARK, KS 66251-2100			2682	

DATE MAILED: 02/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/083,165

Applicant(s)

RAUSCH ET AL.

Examiner

Tuan A Tran

Art Unit

2682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-7, 12-20 and 25-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Carey et al. (2002/0068612).

Regarding claims 1 and 7, Carey discloses a communication system (See fig. 1c) for providing communication services to a plurality of communication devices 20, the communication system comprising: a transmitting antenna 180-380 wherein the transmitting antenna comprises an omni-directional antenna (See fig. 5 and page10 [0093-0094]); a transmitter 32 connected to the transmitting antenna 180-380 and configured to transmit first wireless signals via the transmitting antenna 180-380 (See figs. 4-5 and page 8 [0080], page 9 [0097]); a first receiving antenna 180, 380 wherein a first coverage area of the first receiving antenna 180, 380 is less than 45 degrees, a first receiver 32 connected to the first receiving antenna 180, 380 and configured to receive second wireless signals via the first receiving antenna 180, 380 (See figs. 4-6 and page 10 [0093-0094], [0097], [0102], page 11 [0103]); a second receiving antenna 280

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wherein a second coverage area of the second receiving antenna 280 is less than 45 degrees and within the first coverage area, a second receiver 32 connected to the second receiving antenna 280 and configured to receive third wireless signals via the second receiving antenna 280 (See figs. 4-6 and page 8[0079], page 10 [0093-0094], [0097], [0102], page 11 [0103]); and a communication interface connected to the transmitter, the first receiver, the second receiver, and a communication network and configured to provide the communication services between the communication network and the user communication devices (See fig. 1c and page 4 [0047-0049]).

Claims 14 and 20 are rejected for the same reasons as set forth in claims 1 and 17, as method.

Regarding claims 2-5, Carey discloses as cited in claim 1. Carey further discloses the first wireless signals, the second wireless signals, and the third wireless signals are in the MMDS or MDS frequency range (See fig. 1c and page 4 [0043-0045]).

Claims 15-18 are rejected for the same reasons as set forth in claims 2-5, as method.

Regarding claims 6 and 12-13, Carey discloses as cited in claim 1. Carey further discloses the user communication devices comprise wireless broadband routers 70 (See fig. 3 and page 7 [0070]) and the communication interface comprises a downstream and upstream managers 43, 44, 46 (See fig. 1c and page 4 [0047-0049], page 6 [0061-0063]).

Claims 19 and 25-26 are rejected for the same reasons as set forth in claims 6 and 12-13, as method.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 8-11 and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carey et al. (2002/0068612).

Regarding claims 8-11, Carey discloses as cited in claim 1. However, Carey does not explicitly mention that the first coverage area is 36 or 24 degrees and the second coverage area is 24 or 12 degrees. Sine Carey does suggest that the coverage areas can be adjusted (increasing or decreasing in degree) (See figs. 6, 9-10 and page 10 [0102], page 11 [0103], page 12 [0113], page 13 [0118-0121]); therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to configure the first coverage area is 36 or 24 degrees and the second coverage area is 24 or 12 degrees for the advantage of minimizing the undesired signal level while maintaining a sufficiently uniform distribution of the desired signal level in each coverage area.

Claims 21-24 are rejected for the same reasons as set forth in claims 8-11, as method.

### ***Response to Arguments***

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Applicant's arguments filed 10/11/2004 have been fully considered but they are not persuasive.

a. The Applicant argued that "Carey does not have a receiving antenna that has a coverage area that is within the coverage area of another receiving antenna" (See Remark, page 2). The Examiner respectfully disagrees with the Applicant's argument because Carey does teach a first receiving antenna 180, 380 wherein a first coverage area of the first receiving antenna 180, 380 is less than 45 degrees, a first receiver 32 connected to the first receiving antenna 180, 380 and configured to receive second wireless signals via the first receiving antenna 180, 380 (See figs. 4-6 and page 10 [0093-0094], [0097], [0102], page 11 [0103]); a second receiving antenna 280 wherein a second coverage area of the second receiving antenna 280 is less than 45 degrees and within the first coverage area, a second receiver 32 connected to the second receiving antenna 280 and configured to receive third wireless signals via the second receiving antenna 280 (See figs. 4-6 and page 8[0079], page 10 [0093-0094], [0097], [0102], page 11 [0103]). For that reasons, the Examiner maintains the same rejections for all the pending claims.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Tuan Tran** whose telephone number is **(703) 605-4255**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Vivian Chin**, can be reached at **(703) 308-6739**.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

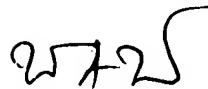
**or faxed to:**

**(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

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Tuan Tran

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VIVIAN CHIN  
SUPERVISORY PATENT EXAMINER  
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